



Premiere Educandum: Jurnal Pendidikan Dasar dan Pembelajaran

Volume 10 (2) 149 – 160 December 2020

ISSN: 2088-5350 (Print) / ISSN: 2528-5173 (Online)

Doi: 10.25273/pe.v10i2.6801

The article is published with Open Access at: <http://e-journal.unipma.ac.id/index.php/PE>

From face-to-face learning to web base learning: How are student readiness?

Arif Widodo, ✉, Universitas Mataram

Nursaptini, Universitas Mataram

Setiani Novitasari, Universitas Mataram

Deni Sutisna, Universitas Mataram

Umar, Universitas Mataram

✉ arifwidodo@unram.ac.id

Abstract: Learning readiness influences learning success. Changing the learning model requires preparation. Well-planned online learning is different from learning in an emergency. This study aims to determine the readiness of student learning in online learning during the Covid-19 pandemic. The type of research used non-experimental quantitative. The data collection method is done by survey. Data analysis uses descriptive statistics. The subjects in this study were PGSD students at Mataram University. The number of respondents involved 260. Problems in this study include: how are students' learning readiness? what are the problems faced by students? Can students take part in online learning well? The results showed that students' learning readiness was still lacking. Students experiencing technical obstacles include lack of online media mastery, no training, limited costs, and difficulties in internet connection. Most students expect online learning to stop and come back face to face.

Keywords: Learning readiness, PGSD students, Online learning

Abstrak: Kesiapan belajar mempengaruhi keberhasilan belajar. Perubahan model pembelajaran membutuhkan persiapan. Pembelajaran online yang direncanakan dengan baik berbeda dengan pembelajaran dalam kondisi darurat. Penelitian ini bertujuan untuk mengetahui kesiapan belajar mahasiswa dalam pembelajaran online selama pandemic Covid-19. Jenis penelitian yang digunakan kuantitatif non eksperimen. Metode pengumpulan data dilakukan dengan survey. Analisis data menggunakan statistik deskriptif. Subjek dalam penelitian ini mahasiswa PGSD Universitas Mataram. Jumlah responden yang terlibat 260. Masalah dalam penelitian ini antara lain: bagaimana kesiapan belajar mahasiswa? apa saja masalah yang dihadapi mahasiswa? Apakah mahasiswa dapat mengikuti pembelajaran online dengan baik? Hasil penelitian menunjukkan bahwa kesiapan belajar mahasiswa masih kurang. Mahasiswa mengalami kendala teknis antara lain: penguasaan media daring kurang, tidak ada pelatihan, keterbatasan biaya dan kesulitan koneksi internet. Sebagian besar mahasiswa berharap pembelajaran online dihentikan dan kembali tatap muka.

Kata kunci: Kesiapan belajar, Mahasiswa PGSD, Pembelajaran online

Received 19 June 2020; **Accepted** 21 September 2020; **Published** 01 December 2020

Citation: Widodo, A., Nursaptini, N., Novitasari, S., Sutisna, D., & Umar, U. (2020). From face-to-face learning to web base learning: How are student readiness? *Premiere Educandum : Jurnal Pendidikan Dasar dan Pembelajaran*, 10(2), 149 – 160. Doi.org/10.25273/pe.v10i2.6801



Copyright ©2020 Premiere Educandum : Jurnal Pendidikan Dasar dan Pembelajaran

Published by Universitas PGRI Madiun. This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

INTRODUCTION

The Covid-19 outbreak has caused tremendous panic (Depoux et al., 2020). Even with that panic, many people have experienced stress, so they have taken extraordinary actions (Mamun & Griffiths, 2020). Moreover, the existence of information terror has made panic in the face of a pandemic increase (Widodo, 2020b). Everyone is forced to do social distancing. Based on several studies, it can be seen that the virus incubation period and its transmission rate are indeed very fast (Lauer et al., 2020). This made many people feel even more afraid. There is not much that each individual can do apart from maintaining distance and social distancing (Bavel et al., 2020). The restrictions on social distancing have a tremendous impact on social activities. Social activities are recommended to be carried out online (Chen, Lerman, & Ferrara, 2020). One of them is learning activities. Even though not many teachers are willing to do online learning. This is inseparable from the many weaknesses that online learning models have. Based on a survey conducted on some teachers, only 1.3% of respondents said it was very important to implement online learning (Kennedy & Archambault, 2012). However, in a pandemic like now, there is no other choice. By forced online learning must be done. Online learning is an alternative during the Covid-19 outbreak. Face-to-face learning activities are forced to not be carried out. The government has issued a policy so that all learning activities are carried out online. When the policy ends is not certain. This policy does not only apply to primary and secondary education but also applies to higher education throughout Indonesia.

According to Simanihuruk et al., (2019) online learning or web base learning is part of E-learning. Its main characteristic is the use of digital media such as computers and other devices in learning. From this, it can be understood that all learning activities that use electronic media can be categorized as e-learning. However, not all e-learning can be categorized as online learning. Learning can be said online if you use the internet network. Online learning is closely related to distance learning. However, between teachers and students, it is possible to interact directly. Prores interactions in online learning greatly affect learning outcomes (Kang & Im, 2013). Changing the learning model from face to face to online learning raises new problems. What's more, done in conditions that are forced. Learning independence in distance learning is very necessary. Students who have good learning independence can get good learning outcomes too (Barnard-Brak, Paton, & Lan, 2010). The problem is not all students can do the same thing. For educational institutions that have implemented distance learning from the beginning, they may not experience significant obstacles. One example is the Open University. Students at the university have been prepared for the distance learning system from the start. For regular universities that have applied face-to-face learning from the beginning, online learning has become a problem. With the government's lockdown policy, universities must improve themselves. It is not only lecturers who are frustrated by these conditions, but also students. Lecturers are not ready to teach and students are not ready to learn. Students in this case are the most disadvantaged. Learning services to students cannot run optimally. The lack of adequate readiness makes the learning process not run well (Dewantara, 2020).

One of the most important aspects that must be considered before determining the learning model is the condition of students. This is closely related to the readiness of student learning itself. Many things must be prepared before the implementation of online learning (Elkaseh, Wong, & Fung, 2015). Learning readiness is not only related to physical conditions but the most important is psychological readiness. In psychological aspects, students are not prepared to take part in online learning. The sudden change caused panic in students. Students are familiar with contextual learning (Widodo, 2020a). The implication is that many students have difficulty in doing online learning. Learning readiness can be grouped into two categories. The first category relates to the level of development of a person who allows them to have the ability to learn. The second category deals with readiness in terms of cognitive, social, linguistic, and certain skills so that they

can learn well. Learning readiness can also be interpreted as a willingness to carry out learning activities (Bahsan, Mohamad, & Mahazan, 2018). Learning readiness is also related to the nature and ability of a person to respond to learning activities. From this, it can be understood that the condition of the student participants in the real readiness of learning. Learning readiness must be fulfilled by each student before conducting learning activities. The student condition is the most important aspect of preparation for learning. If the conditions of students are not well prepared, the learning process will not run well (Mohd, Daud, & Elzibair, 2015). Broadly speaking, a conclusion can be drawn that essentially the readiness of learning is the condition of students in conducting learning activities consciously. The aim is to gain new knowledge and experience that has never been known before.

One of the changes in learning that is very felt today is the change in learning models from face to face to online learning. Nowadays digital media has been widely used as an alternative in solving various problems (Maharani, Kholid, Pradana, & Nusantara, 2019). One of them is in solving learning problems. The use of digital media in learning is a must. Technological advances are widely used as learning (Lestari & Chasanatun, 2018). Appropriate learning media can increase student interest in learning (Widyaningrum, 2016). Several studies state the effectiveness of the use of digital media (Pradana, Sholikhah, Maharani, & Kholid, 2020). Research Nurhikmawati & Lestari, (2019) concluded that Screencast and Google Classroom as digital media can be used for learning English classes. Research Pradana, (2016) explains that the use of e-learning in learning can stimulate the development of students' multiple intelligences. Other research has also proven the effectiveness of online learning (Wallace & Clariana, 2020). The research explained that there was no significant difference in the aspects of knowledge between online class students and traditional class students. This means that online classes are as effective as face-to-face classes. Further in the study explained that there are some weaknesses in online classes. One of them is students who have low knowledge of computer media find it difficult to study online. However, not all education practitioners are ready for change. Not only students, many teachers who feel foreign to online learning (Kennedy & Archambault, 2012). But in this study, the question is the readiness of student learning. Are students ready to face this change? Therefore, it is necessary to research to find out how students' learning readiness is facing online learning.

There are several previous studies which stated that learning readiness influences learning outcomes (Jayadiningrat, Tika, & Yuliani, 2017). Other studies mention the readiness of learning can increase student optimism in taking the exam (Rizki, 2013). In terms of online learning readiness, there is one study that states that not all students are ready to take part in online learning (Mardhiyana & Nasution, 2018). Subsequent research was conducted by Kusmawan, (2016) who stated that students' self-study readiness in distance learning models was included in the medium category. Similar research has also been carried out by (Tereseviciene, Trepule, Dauksiene, Tamoliune, & Costa, 2020). The research explained that many tertiary institutions experienced obstacles in implementing online learning. Research Muqtadiroh, Nisafani, & Silviana, (2017) states that one secondary school in the Jember district is ready to carry out online learning. However, the study further explained that the readiness of student learning in online learning needs to be increased again.

Online learning experiences carried out with good planning are different from online learning conducted in emergencies (Hodges, Moore, Lockee, Trust, & Bond, 2020). The web-based learning model that was carried out during the Covid-19 pandemic was carried out in an emergency. Many things need to be evaluated. Therefore in this study will evaluate how students' readiness of learning in online learning during the COVID 19 outbreak. This study aims to examine the readiness of student learning during the Covid-19 pandemic. Considering online learning is done because of compulsion. In this forced condition, how about students' readiness to study? what are the problems faced by students in online learning? Can students take part in online learning well? This research

is important to be conducted to obtain data about student readiness to study. By knowing the readiness of students to learn to improve online learning systems can be done.

METHODS

The design of this research is quantitative. The approach used is descriptive. In this study, there was no treatment for the research respondents. Treatment is experimental research is limited to data collection (Sugiyono, 2013). In other terms, this research includes non-experimental research. The data collection method was carried out by the survey. The instrument used was a questionnaire. There are two types of questionnaires used, namely closed questionnaires and open questionnaires. Spread the questionnaire using Google Form. The research begins with making instruments, distributing questionnaires through Google Form, then tabulating data, presenting, and finally conducting data summaries. The indicators used in this research can be seen in **Table 1**.

TABLE 1. *Research instrument*

Indicator	Question form
Preparation before online learning	Have you made any special preparations for online learning?
Ability to take part in online learning	Are you able to follow online learning well?
Use of online media	Have you ever had difficulty using online media?
Online learning training intensity	Do you often take online learning training
Ability to understand course material	Can you understand the course material well through online learning?
Students' perceptions of online learning readiness	Do you feel that you are ready to take part in online learning?
Online learning difficulties	What difficulties do you often encounter during online learning?

The research subjects involved PGSD students of Mataram University in the even semester of the 2019-2020 school year. Sample selection is done randomly. The number of respondents who were willing to fill out the questionnaire was 260 students. Respondents were scattered from semester 2 to semester 8. Most of the students who were willing to fill out the questionnaire were female. The table below shows the characteristics of the respondents involved in research based on gender.

TABLE 2. *Participant characteristics*

Gender	Amount	%
Men	35	13,5%
Woman	225	86,50%
Amount	260	100,00%

Data analysis using descriptive statistics. In the descriptive statistics that will be analyzed are the average score and the percentage of data. This study does not intend to generalize the research results for the entire population, but the research results only apply to the sample in the study.

RESULTS

This research was conducted by conducting a survey of PGSD students at Mataram University. There are two types of questionnaires used in this study. The first questionnaire was a closed questionnaire containing five questions. The second questionnaire contains an open questionnaire containing two questions. The following

shows the answers of respondents to the closed questionnaire and the open questionnaire.

Closed Questionnaire Answers

In a closed questionnaire, the first question that is given to the respondent is “did you make special preparations for online learning? The respondent's answer to the first question can be seen in the first diagram.

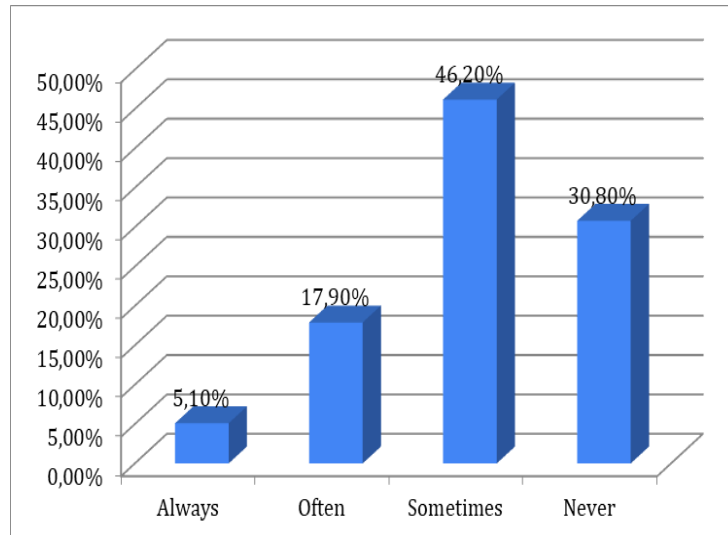


FIGURE 1. *Online learning preparation*

Figure 1 as seen above shows that respondents who claimed to always make special preparations to participate in online learning were only 5.10% of the total respondents. Respondents who often make special preparations as much as 17.90%. The highest number of respondents said they rarely made preparations, which was 46.20%. The remaining 30.80% did not prepare at all. The data shows that students' willingness to participate in online learning is still low. This relates to the level of willingness and motivation to learn online students. The next aspect that is questioned to students is whether you can follow online learning well? Student answers to these questions can be seen in **Figure 2**.

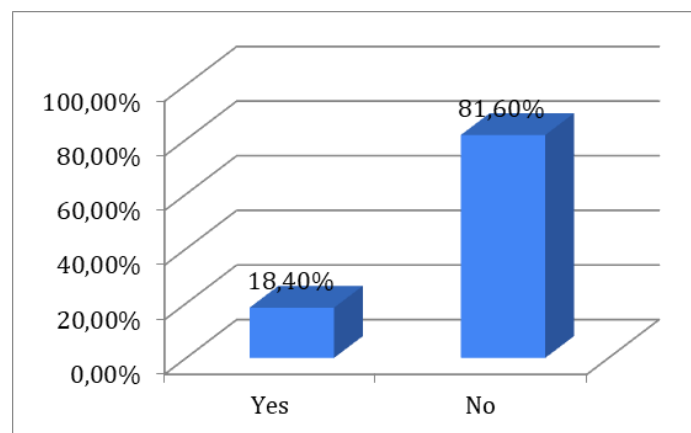


FIGURE 2. *Ease of learning*

Figure 2 displays data about the level of fluency of students in participating in online learning. Based on these pictures, it can be seen that the number of students who

claim to be able to take part in online learning is only 18.40%. As many as 81.60% of students claimed that they could not follow learning well. This shows that students experience many problems with online learning. Only a few students can participate in learning well. The next aspect that is questioned to students is whether you have experienced difficulties in using/operating online media used by lecturers.

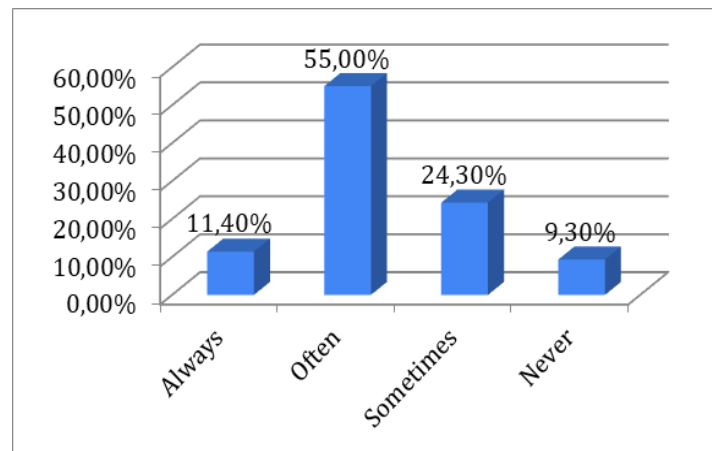


FIGURE 3. *Difficulty using online media*

Figure 3 presents data about the difficulty of using online media. Based on Figure 3 it can be explained that there are still those who are always and often have difficulty using online media. The number of students who always experience difficulties is 11.40%. The most number is the frequent category, which is 55.00%. The number of students who rarely experience difficulties are 24.30%. The number of students who have never experienced problems using online media is only 9.30%. The data shows that most students still find difficulties in operating online media. If the total is more than half the respondents. The next aspect that is questioned to students is whether you often attend online learning training.

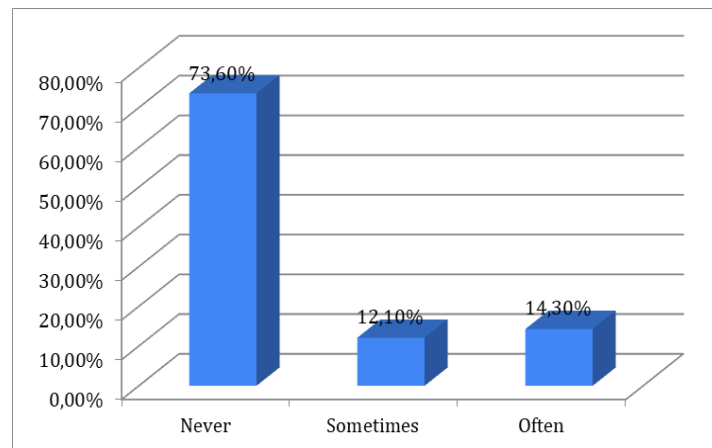


FIGURE 4. *The intensity of online learning training*

The intensity in attending online training is important to ask respondents. The intensity of training is related to the ability of students to use online media. Considering online learning uses a lot of new technology. Data related to the intensity of training can be seen in **Figure 4**. The data shows that the number of students who have never attended online learning training is 73.60%. Nearly three-quarters of respondents have never attended the training. Respondents who claimed to be rare were 12.10%. While students who claim to participate often only 14.30%. Exposure to these data shows that online

training is still rarely attended by students. The next question given to students is whether you can understand lecture material well through online learning?

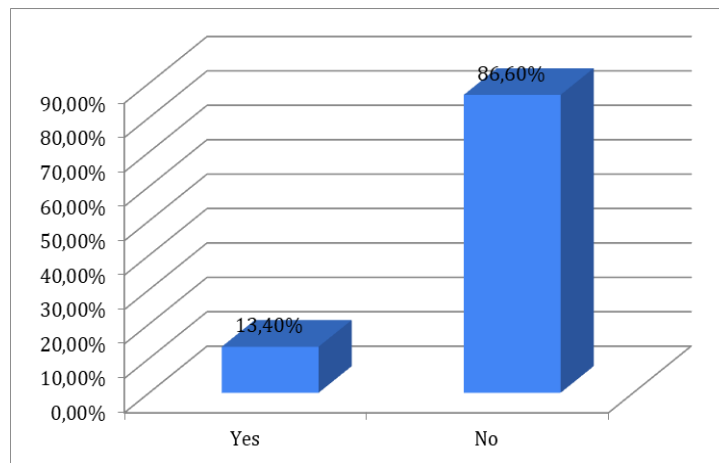


FIGURE 5. *The ability to understand lecture material*

The ability to understand learning material is an indicator of student learning readiness. Students who have the readiness to study in general can understand the subject matter well. Student recognition of the ability to understand the material can be seen in Figure 5. The number of students who can understand the lecture material well is only 13.40%. As many as 86.60% of students claimed that they could not understand the material well. This shows that in understanding lecture material through online media, most students are still having difficulties.

Open questionnaire answers

In the open questionnaire part, respondents are asked open questions so that respondents can provide answers in detail based on their experiences. With this kind of question model, respondents can provide various answers so that the data There are two questions given to respondents in an open questionnaire. The first question relates to students' perceptions of online learning readiness, while the second question relates to difficulties experienced by students during online learning. Based on the data collected through an open questionnaire, it can be described as follows. Respondents' answers to the first question: Many students feel not ready to take part in learning. The online learning that has been followed so far is the only compulsion. Conditions that make students forced to study online. Students hope that face-to-face learning will resume soon. Many students claim to be depressed because the online model has more assignments. Sitting for a long time in front of a computer or android harms health. Many students complain if they have to read modules given by the lecturers. They admit that their eyes get tired if they have to read on a computer screen for too long. Besides, the level of focus in learning is very different between online learning and face-to-face learning. Many students admit that the conditions at home are not conducive to studying. Respondents' answers to the second question: Limited internet quota and difficult internet connection make students miss face-to-face learning more. Online learning costs a lot. Besides, each lecturer uses different online media. This makes students experience difficulties. Moreover, online media is still foreign to students' daily lives. Many of the difficulties faced by students are related to technical problems. Students are busy uploading assignments that sometimes cannot be delivered. Many technical matters make it difficult for students. therefore it is not surprising that lecturers agree to use the easiest media for students to follow. Based on a survey that has been conducted, the average student chooses WAG and Google Classroom as online media.

DISCUSSION

The description of the data in the research results shows that students' readiness in learning online is still lacking. Many things must be prepared if the online model continues. Learning readiness involves aspects of motivation, attention, and the learning readiness process itself. Motivation is not the only absolute condition that must be met to learn well, but plays an important role in determining learning success (Nursaptini, Syazali, Sobri, Sutisna, & Widodo, 2020). There have been many studies on the importance of motivation in learning activities. However, it cannot be denied that there are other factors beyond that which affect learning outcomes. The concentration level of students can also affect learning outcomes. The condition of students who cannot fully concentrate during online learning is a problem in itself. This is the following research Arizona, Abidin, & Rumansyah, (2020) which states that the level of student concentration in online learning is very low. One of them is that the condition of the house is less conducive. Every student learning activity is required to always focus on getting good learning results. The ability to select information that is present at the same time is very important. Students who have a high level of concentration are not affected by conditions outside of themselves when they are focused on studying. The level of focus has a big share of learning outcomes. Besides that, the most important thing is the process of how a student prepares. If the study preparation is still the same as the previous condition, it means that there is no improvement. Every student must be ready to learn in any condition. Students must be prepared for every change. Included in this are changes in the learning model. Every change must be addressed wisely. Students should have thinking skills in dealing with any new problems they face (Umar et al., 2020).

Online models are in some circumstances useful for learning. This media is considered flexible and practical (Imam & Cleland, 2020). However, the use of online media must be wise. If the use of online media is not properly controlled, it can harm student behavior, one of which is in shaping social behavior (Sutisna et al., 2020). The cooperation of various parties is very necessary for educational goals that can be achieved (Nursaptini, Anar, et al., 2020). Apart from some of the bad effects caused by the use of online media such as laptops and gadgets, the online learning model has many benefits. Through online learning, the independence and sense of responsibility of students to learn is increased (Barnard-Brak et al., 2010). This is following the results of research Sobri, Nursaptini, & Novitasari, (2020) which state that online learning allows students to be more independent. They have a more sense of responsibility and can evaluate themselves. However, not all students are ready for the online model. There is a study that states that one of the factors for the success of online learning is the ability to use information technology (Hayashi, Chen, Ryan, & Wu, 2020). This statement is following research Wallace & Clariana, (2020) which explains that students who have a low level of knowledge of technology cannot understand online learning instructions well. In this case, the success of online learning depends on the ability of lecturers and students to operate this technology. Several things must be prepared before doing online learning, one of which is training in the use of online media in learning (Ruth C. Clark, 2016). According to Simanihuruk et al., (2019) many educators still stutter with technological developments. The implication is that the use of technology is still lacking. This is none other than the lack of ability to master technology.

Through online learning, it allows interactions between lecturers and students to run effectively. The process of good interaction between lecturers and students in online learning can produce satisfying learning outcomes (Kang & Im, 2013). However, the interactions that have been carried out so far have not been very good. There are still many lecturers who only provide modules and lecture assignments. Giving modules is not effective considering that students' reading interest is still low (Widodo, Indraswasti, Erfan, Maulyda, & Rahmatih, 2020). The literacy level of students as prospective teachers in various fields is still lacking. The culture of reading as a good habit has not been done by many students (Sobri, Nursaptini, Widodo, & Sutisna, 2019). This shows the low interest

in student learning. Low interest in learning harms student learning outcomes themselves. One alternative method that might be applied is mixed methods. There is a study that states the effectiveness of the combination of online and traditional learning methods (Lo & Hew, 2020). Research Arizona, Abidin, & Rumansyah, (2020) states that during a pandemic online learning can be done. However, it is necessary to make modifications so that learning can attract students' interest in learning. In this study, it was explained that one approach that could be used was project-based online chasing. This needs to be done considering that students' learning readiness in online learning is not very good. Therefore online learning cannot be fully carried out.

CONCLUSION

The conclusion in this study shows that in an emergency students' readiness for learning is still lacking. Analysis of the condition of students does not allow online learning to be done well. Many students experience obstacles, especially related to technical problems. Less online media mastery, no online training, limited cost, and internet connection difficulties are the most difficult problems faced by students. Students cannot follow the web base learning model well, one of the indicators is the low level of mastery of learning material. Not a few students who hope that online learning is stopped and come back face to face.

There are several weaknesses contained in this study. One of them is the data analysis technique used. In this study data analysis is only based on descriptive statistics. Therefore the conclusions obtained in this study cannot be applied to the entire population. The conclusion in this study can only be applied to respondents involved in the study. The second drawback is that this research was conducted online by using Google Form. Although there are open questionnaires in the instrument, in digging the data less in-depth. Researchers cannot deepen further information such as direct interviews.

Several suggestions can be given from the results of this study, among others: 1) the results of the research can be used as an evaluation material for online learning that has been done; 2) for policyholders in universities should imp Umar rove student learning readiness before conducting online learning; 3) bearing in mind that learning is carried out in an emergency lecturers should pay attention to students' readiness to use online media.

REFERENCES

1. Arizona, K., Abidin, Z., & Rumansyah, R. (2020). Pembelajaran online berbasis proyek salah satu solusi kegiatan belajar mengajar di tengah pandemi covid-19. *Jurnal Ilmiah Profesi Pendidikan*, 5(1), 64–70. <https://doi.org/10.29303/jipp.v5i1.111>
2. Artwodini Muqtadiroh, F., Ahifia Nisafani, A., & Silviana, N. (2017). Analyzing student readiness of e-learning implementation in middle school. *Proceedings of the 1st Yogyakarta International Conference on Educational Management/Administration and Pedagogy (YICEMAP 2017)*, 59–65. <https://doi.org/10.2991/yicemap-17.2017.11>
3. Bahsan, R., Mohamad, S. N. A., & Mahazan, S. N. D. (2018). Comparative analysis of engineering and art learner's readiness towards the use of e-portfolio. *International Journal of Engineering & Technology*, 7(4), 394–397. <https://doi.org/10.14419/ijet.v7i4.36.28149>
4. Barnard-Brak, L., Paton, V. O., & Lan, W. Y. (2010). Profiles in self-regulated learning in the online learning environment. *The International Review of Research in Open and Distributed Learning*, 11(1), 61–80. <https://doi.org/10.19173/irrodl.v11i1.769>
5. Bavel, J. J. Van, Baicker, K., Boggio, P. S., Capraro, V., Cichocka, A., Cikara, M., ... Willer, R. (2020). Using social and behavioural science to support COVID-19 pandemic response. *Nature Human Behaviour*, 4(5), 460–471. <https://doi.org/10.1038/s41562-020-0884-z>

6. Chen, E., Lerman, K., & Ferrara, E. (2020). *COVID-19: The first public coronavirus twitter dataset. March*, 4–5. Retrieved from <http://arxiv.org/abs/2003.07372>
7. Depoux, A., Martin, S., Karafillakis, E., Preet, R., Wilder-Smith, A., & Larson, H. (2020). The pandemic of social media panic travels faster than the COVID-19 outbreak. *Journal of Travel Medicine*, 27(3), 368–371. <https://doi.org/10.1093/jtm/taaa031>
8. Dewantara, I. P. M. (2020). Curriculum changes in Indonesia: Teacher constraints and students of prospective teachers' readiness in the implementation of thematic learning at low grade primary school. *Elementary Education Online*, 19(2), 1047–1060. <https://doi.org/10.17051/ilkonline.2020.696686>
9. Elkaseh, A., Wong, K. W., & Fung, C. C. (2015). A review of the critical success factors of implementing E-learning in higher education. *International Journal of Technologies in Learning*, 22(2), 1–13. <https://doi.org/10.18848/2327-0144/CGP/v22i02/49160>
10. Hayashi, A., Chen, C., Ryan, T., & Wu, J. (2020). The role of social presence and moderating role of computer self efficacy in predicting the continuance usage of e-learning systems. *Journal of Information Systems Education*, 15(2), 139–154. Retrieved from <https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1531&context=-jise>
11. Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. *Educause Review*, 1–12. Retrieved from <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning?>
12. Imam, N., & Cleland, T. A. (2020). Rapid online learning and robust recall in a neuromorphic olfactory circuit. *Nature Machine Intelligence*, 2(3), 181–191. <https://doi.org/10.1038/s42256-020-0159-4>
13. Jayadiningrat, M. G., Tika, I. N., & Yuliani, N. P. (2017). Meningkatkan kesiapan dan hasil belajar siswa pada pembelajaran kimia dengan pemberian kuis di awal pembelajaran. *Jurnal Pendidikan Kimia Indonesia*, 1(1), 7–12. <https://doi.org/10.23887/jpk.v1i1.12806>
14. Kang, M., & Im, T. (2013). Factors of learner-instructor interaction which predict perceived learning outcomes in online learning environment. *Journal of Computer Assisted Learning*, 29(3), 292–301. <https://doi.org/10.1111/jcal.12005>
15. Kennedy, K., & Archambault, L. (2012). Offering preservice teachers field experiences in k-12 online learning. *Journal of Teacher Education*, 63(3), 185–200. <https://doi.org/10.1177/0022487111433651>
16. Kusmawan, U. (2016). Self-Directed learning readiness of elementary school teacher as student of open university. *Jurnal Pendidikan Dan Kebudayaan*, 1(3), 279–293. Retrieved from <http://jurnaldikbud.kemdikbud.go.id>
17. Lauer, S. A., Grantz, K. H., Bi, Q., Jones, F. K., Zheng, Q., Meredith, H. R., ... Lessler, J. (2020). The incubation period of coronavirus disease 2019 (COVID-19) from publicly reported confirmed cases: Estimation and application. *Annals of Internal Medicine*, 172(9), 577–582. <https://doi.org/10.7326/M20-0504>
18. Lestari, S., & Chasanatun, T. W. (2018). Applying Technology in teaching english: padlet, animoto, and sway. *Proceedings of the 2nd Social Sciences, Humanities and Education Conference: Establishing Identities through Language, Culture, and Education (SOSHEC 2018)*, 222(SoSHEC), 77–80. <https://doi.org/10.2991/soshec-18.2018.16>
19. Lo, C. K., & Hew, K. F. (2020). A comparison of flipped learning with gamification, traditional learning, and online independent study: the effects on students' mathematics achievement and cognitive engagement. *Interactive Learning Environments*, 28(4), 464–481. <https://doi.org/10.1080/10494820.2018.1541910>
20. Maharani, S., Kholid, M. N., Pradana, L. N., & Nusantara, T. (2019). Problem solving in the context of computational thinking. *Infinity Journal: Journal of Mathematics Education*, 8(2), 109–116. <https://doi.org/https://doi.org/10.22460/infinity.v8i2.p109-116>
21. Mamun, M. A., & Griffiths, M. D. (2020). First COVID-19 suicide case in Bangladesh due to fear of COVID-19 and xenophobia: Possible suicide prevention strategies. *Asian*

- Journal of Psychiatry*, 51, 1–2. <https://doi.org/10.1016/j.ajp.2020.102073>
22. Mardhiyana, D., & Nasution, N. B. (2018). Kesiapan mahasiswa pendidikan matematika menggunakan e-learning dalam menghadapi era revolusi industri 4.0. *Seminar Nasional Pendidikan Matematika Ahmad Dahlan*, 31–35. Retrieved from <http://seminar.uad.ac.id/index.php/sendikmad/article/view/1034/pdf>
23. Mohd, F., Daud, E. H. C., & Elzibair, I. (2015). The usage of online assessment towards self-efficacy readiness in learning. *Proceedings of the 9th International Conference on Ubiquitous Information Management and Communication - IMCOM '15*, 1–4. <https://doi.org/10.1145/2701126.2701149>
24. Nurhikmawati, A. R., & Lestari, S. (2019). Applying screencast and google classroom application for ept online course. *Proceedings of the Social Sciences, Humanities and Education Conference (SoSHEC 2019)*, 380(SoSHEC), 319–322. <https://doi.org/10.2991/soshec-19.2019.69>
25. Nursaptini, N., Anar, A. P., Indraswati, D., Wiododo, A., Novitasari, S., & Sutisna, D. (2020). School operational assistance and challenges of communities' participation at madrasah tsanawiyah in central lombok. *Proceedings of the 1st Annual Conference on Education and Social Sciences (ACCESS 2019)*, 465(Access 2019), 279–282. <https://doi.org/10.2991/assehr.k.200827.070>
26. Nursaptini, Syazali, M., Sobri, M., Sutisna, D., & Widodo, A. (2020). Profil kemandirian belajar mahasiswa dan analisis faktor yang mempengaruhinya: komunikasi orang tua dan kepercayaan diri. *JPE (Jurnal Pendidikan Edutama)*, 7(1), 1–30. Retrieved from <https://ejurnal.ikipgribojonegoro.ac.id/index.php/JPE/article/view/711/pdf>
27. Pradana, L. N. (2016). E-Learning pada pembelajaran geometri dan hubungannya dengan kecerdasan majemuk. *Posiding Seminar Nasioanal "Menjadi Guru Inspirator,"* (April), 365–374. Purwokerto: Universitas Muhammadiyah Purwokerto.
28. Pradana, L. N., Sholikhah, O. H., Maharani, S., & Kholid, M. N. (2020). Virtual mathematics kits (VMK): Connecting digital media to mathematical literacy. *International Journal of Emerging Technologies in Learning (IJET)*, 15(03), 234–241. <https://doi.org/10.3991/ijet.v15i03.11674>
29. Rizki, U. Y. (2013). Hubungan kesiapan belajar dengan optimisme mengerjakan ujian. *Educational Psychology Journal*, 2(1), 49–56. Retrieved from <https://lib.unnes.ac.id-/18465/1/1550408015.pdf>
30. Ruth C. Clark, R. E. M. (2016). *E-Learning and the science of instruction: Proven Guidelines for consumers and designers of multimedia learning* (4th ed.). Retrieved from https://books.google.co.id/books?id=v1uzCgAAQBAJ&dq=e+learning&lr=&hl=id&source=gbs_navlinks_s
31. Simanihuruk, L., Simarmata, J., Sudirman, A., Hasibuan, M. S., Safitri, M., Sulaiman, O. K., ... Sahir, S. H. (2019). *E-Learning: Implementasi, strategi dan inovasinya* (1st ed.; T. Limbong, ed.). Yayasan Kita Menulis.
32. Sobri, M., Nursaptini, N., & Novitasari, S. (2020). Mewujudkan kemandirian belajar melalui pembelajaran berbasis daring diperguruan tinggi pada era industri 4.0. *JURNAL PENDIDIKAN GLASSER*, 4(1), 64–71. <https://doi.org/10.32529/glasser.v4i1.373>
33. Sobri, M., Nursaptini, N., Widodo, A., & Sutisna, D. (2019). Pembentukan karakter disiplin siswa melalui kultur sekolah. *Harmoni Sosial: Jurnal Pendidikan IPS*, 6(1), 61–71. <https://doi.org/10.21831/hsjpi.v6i1.26912>
34. Sugiyono. (2013). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif, dan R&D*. Bandung: Alfabeta.
35. Sutisna, D., Widodo, A., Nursaptini, N., Umar, U., Sobri, M., & Indraswati, D. (2020). An analysis of the use of smartphone in students' interaction at senior high school. *Proceedings of the 1st Annual Conference on Education and Social Sciences (ACCESS 2019)*, 465(Access 2019), 221–224. <https://doi.org/10.2991/assehr.k.200827.055>
36. Tereseviciene, M., Trepule, E., Dauksiene, E., Tamoliune, G., & Costa, N. (2020). Are Universities ready to recognize open online learning? *International Education Studies*, 13(2), 21–32. <https://doi.org/10.5539/ies.v13n2p21>

37. Umar, U., Kaharuddin, A., Fauzi, A., Widodo, A., Radiusman, R., & Erfan, M. (2020). A Comparative study on critical thinking of mathematical problem solving using problem based learning and direct intruction. *Proceedings of the 1st Annual Conference on Education and Social Sciences (ACCESS 2019)*, 465(Access 2019), 314–316. <https://doi.org/10.2991/assehr.k.200827.079>
38. Wallace, P., & Clariana, R. (2020). Achievement Predictors for a computer-applications module delivered online. *Journal of Information Systems Education*, 11(1), 13–18. Retrieved from <https://aisel.aisnet.org/cgi/viewcontent.cgi?article=-1670&context=jise>
39. Widodo, A. (2020a). Nilai budaya ritual perang topat sebagai sumber pembelajaran ips berbasis kearifan lokal di sekolah dasar. *Gulawentah: Jurnal Studi Sosial*, 5(1), 1–16. <https://doi.org/10.25273/gulawentah.v5i1.6359>
40. Widodo, A. (2020b). Teror informasi dan perilaku mahasiswa dalam penggunaan media sosial selama pandemi covid-19. *Civic-Culture : Jurnal Ilmu Pendidikan PKN Dan Sosial Budaya*, 4(1), 45–58. Retrieved from <http://jurnal.stkippgri-bkl.ac.id/index.php/CC/article/view/364>
41. Widodo, A., Indraswasti, D., Erfan, M., Maulyda, M. A., & Rahmatih, A. N. (2020). Profil minat baca mahasiswa baru PGSD Universitas Mataram. *Premiere Educandum : Jurnal Pendidikan Dasar Dan Pembelajaran*, 10(1), 34–48. <https://doi.org/10.25273/pe.v10i1.5968>
42. Widyaningrum, H. K. (2016). Penggunaan media audio untuk meningkatkan kemampuan menyimak dongeng anak pada siswa kelas IV Sekolah dasar. *Premiere Educandum : Jurnal Pendidikan Dasar Dan Pembelajaran*, 5(02), 200–209. <https://doi.org/10.25273/pe.v5i02.284>

PROFILE

Arif Widodo is a lecturer in the Elementary School Teacher Education Program at the University of Mataram. In addition to being involved in the world of research, he is also active in the social and literacy movements.

Nursaptini is a lecturer in the Elementary School Teacher Education Program at the University of Mataram. He is interested in research related to sociology, social science, and educational research.

Setiani Novitasari is a lecturer in the Elementary School Teacher Education Program at the University of Mataram. Interested in research related to history, social science, and educational research.

Deni Sutisna is a lecturer in the Elementary School Teacher Education Program at the University of Mataram. Interested in research related to Geography, social sciences, and educational research.

Umar is a lecturer at the University of Mataram. Every day the activities carried out are teaching mathematics education courses in elementary school education study programs. Aside from teaching, he also actively conducts research. Some research topics that have been carried out are elementary school mathematics learning models, ethnomathematics, online learning, and inclusive education.